



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,138	08/11/2006	Sandrine Chanut	21427-002US1 QT FR05/0034	5842
26161 7590 01/09/2009 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER MARCANTONI, PAUL D	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 01/09/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/589,138	<b>Applicant(s)</b> CHANUT ET AL.	
	<b>Examiner</b> Paul Marcantoni	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/8/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

35 USC 112 Second Paragraph:

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

The terms “very high performance” is relative and indefinite. Delete these terms so preamble reads ---a self-compacting concrete comprising--- in claim 1.

The terms “calcined bauxite sands” is vague. Is there more than one kind of bauxite sand or is it just one type of bauxite sand with various particle sizes in claim 1. If only one kind or type of bauxite sand please delete "sands" and replace with --sand--- throughout the claims.

The terms “preferably” listed twice in claim 1 is indefinite. Delete from this claim and all claims it is used. Please break up into separate dependent claims off of claim 1 (and other independent claims as well when preferably used) each time preferably is used. It is improper to use this term in claim language.

The terms “and better still” is synonymous with preferably and also indefinite. Please break this up into a separate dependent claim.

The term “preferably” is indefinite in claim 2. Make this phrase a separate dependent claim.

The terms “very high performance” is a relative and indefinite term in claim 3. Please delete these terms.

The terms “preferably”, “better still” and “preferably” listed in that order in claim 3 are indefinite for the same reasons as stated above.

The terms “small” (cubes) in claim 4 is indefinite. Deletion of small or if the size of small is defined in the specification please point out where this might be. If it is defined in specification, the rejection will be withdrawn. If not, delete "small".

The term “white cement” is not clear. Do applicants mean “white Portland cement?” (See claim 5).

The terms “chosen from” should be amended to --selected from the group consisting of---. The term “preferably chosen from is indefinite”. Preferably is indefinite. Applicants should break this claim 7 into a separate dependent claim and also make the second "chosen from" --selected from the group consisting of---.

The terms “preferably” is indefinite each instance it occurs in claim 8. It appears it is listed five times. Break these limitations using preferably into separate dependent claims.

Claim 10 lists preferably four times and it is indefinite. Again, break these preferably limitations into separate dependent claims.

The terms “the desired fluidity” is indefinite. Amend to --an effective fluidity—to resolve in claim 12.

The terms “such as” (after constituents on line 4 of claim 12) is indefinite. Delete such as and insert therefor --including--.

The terms “sands” should be amended to --sand--.

The terms “firstly” should be amended to --first--.

The parentheses in claim 12 are indefinite around “if these are in liquid form. Please remove the parentheses.

The terms “the desired fluidity” at the end of claim 12 is indefinite. Please amend to ---an effective fluidity---.

In claim 13, consider amending “making it possible” to ---capable of--.

In claim 15, “small” is indefinite as stated above.

In claim 16, it is unclear if “white cement” is “white Portland cement---.

In claim 17, delete “it being possible” and insert therefor ---optionally--.

In claim 17, “such as” (before ground slag) should be amended to --including--.

Such as is indefinite terms.

The terms “chosen from” should be amended to --selected from the group consisting of—in claim 18. The term “preferably” is indefinite and again make this a separate dependent claim.

The use of a trademark or tradename in a claim is indefinite as in claim 18. Kevlar which is both it appears should be amended to its actual chemical formula and this should be inserted into both the specification and the claims. (It is not new matter to do so).

The terms “the desired fluidity” in claim 19 should be amended to --an effective fluidity---. The terms “such as” should be amended to --including--.

The terms “sands” should be amended to -sand- in claim 19.

The term “firstly” should be amended to --first--.

Deletion of the parentheses again is advised. It is indefinite if not done so.

The terms “desired” (fluidity) should be amended to --an effective fluidity--.

Art Unit: 1793

35 USC 103:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *EP 0934915 A*, *Bache (US 4,588,443)*, *Clavaud et al. '234*, *Orange et al. '364 A1* or *'256 B2*, or *Casabonne et al. (FR 2813074 abstract)*.

*Note: EP '915 A and Bache '443 both cited in EPO International Search Report.*

EP 9934915 teaches a concrete comprising the same components as applicants' instant invention (See claims). Even if not anticipated, overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art.

Bache '443 teaches a concrete also comprising the same components of applicants' instant invention and in overlapping amounts. Even if not anticipated, overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art. Bache teaches the limitations of applicants claims which can be found in col.8, lines 23-25, col.29, lines 33-52, col.39, lines 31-38, and col.39, lines 41-52 as well

Art Unit: 1793

as the respective examples. This information was also pointed out in the EPO International Search Report for applicants' instant application.

Clavaud et al. '234 teach a concrete comprising Portland cement (claim 5, col.10), calcined bauxite (claim 3, col.9), and limestone (calcium carbonate) fines (claim 4, col.9) thus anticipating applicants' instant claims. Further, it would appear the component particle sizes also overlap thus meeting the limitations of applicants' instant claims. Even if not anticipated, the use of the other components are admixtures conventionally added to cement and concrete and would have been understood as obvious to one of ordinary skill in the art.

Orange et al. '364 A1 or '256 B2 both teach a composition comprising Portland cement (p.4 [0076]), silica fume (p.4 [0080]), and calcium carbonate fibers (p.4 [0086]) thus anticipating applicants' instant claims. Further, it would appear the component particle sizes also overlap thus meeting the limitations of applicants' instant claims. Even if not anticipated, the use of the other components are admixtures conventionally added to cement and concrete and would have been understood as obvious to one of ordinary skill in the art.

Casabonne et al. (FR '074 abstract) teach also a high performance concrete like applicants comprising the same admixture components and most importantly bauxite and limestone thus anticipating applicants' instant claims (see abstract). . Further, it would appear the component particle sizes also overlap thus meeting the limitations of applicants' instant claims. Even if not anticipated, the use of the other components are admixtures conventionally added to cement and concrete and would have been

Art Unit: 1793

understood as obvious to one of ordinary skill in the art. It would also appear that the compressive strengths are the same as or greater than those of applicants and thus even if not anticipated, Casabonne would appear to render applicants' instant claims obvious to one of ordinary skill in the art.

Cited of Interest:

The Cheyrezy patents have been cited of interest (US 6,478,867 B1 and 6,723,162 B1) but not used in a rejection of applicants' claims because it would not appear that either teaches the use of "bauxite" sand.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Paul Marcantoni/  
Primary Examiner, Art Unit 1793